



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,193	08/31/2004	James A. Cooke	IP 116.1	5192
23470	7590	09/08/2008		
SRAM CORPORATION 1333 N. KINGSBURY, 4TH FLOOR CHICAGO, IL 60642			EXAMINER RASHID, MAHBUBUR	
			ART UNIT 3683	PAPER NUMBER
			NOTIFICATION DATE 09/08/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

lserdyski@sram.com  
mm@sram.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/711,193	<b>Applicant(s)</b> COOKE, JAMES A.	
	<b>Examiner</b> MAHBUBUR RASHID	<b>Art Unit</b> 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-10,12,13 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4, 6-10, 12, 13 and 15-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### ***Specification***

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

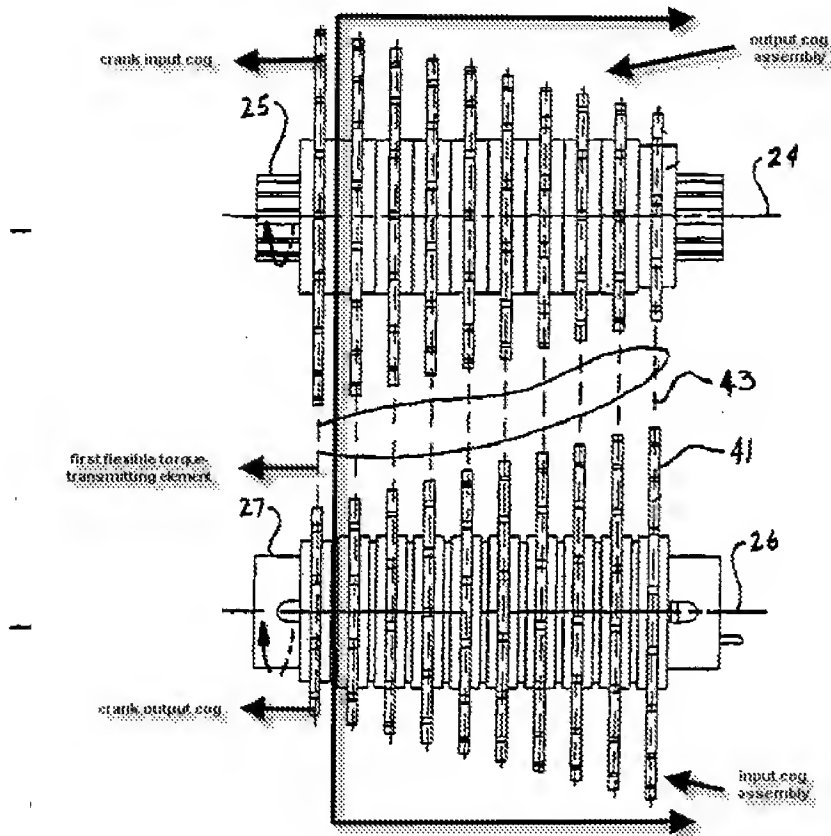
### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3683

**Claims 1, 3, 4, 6-10, 12, 13 and 15-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Dratewski (US 2004/0067804 A1) in view of Linde (WO 02/08050 A1).



Regarding **claim 1**, Dratewski discloses a transmission (figs. 1 and 2, (20)) comprising:

- an input shaft (fig. 2, (27); see also [0085]);

an input cog assembly ((40); see also [0086]) mounted to the input shaft, the input cog assembly including a plurality of varying diameter input cogs arranged sequentially (see [0086]);

an output shaft (fig. 2, (25); see also [0085]) disposed substantially parallel to the input shaft;

an input device (fig. 13, (76)), the output shaft (fig. 2, (25); see also [0085]) is connected to the input shaft (fig. 2, (27); see also [0085]) by a first flexible torque-transmitting element (chain) (see fig. above) and a second flexible torque-transmitting element (drive chain) (fig. 13, (80));

an output cog assembly ((38); see also [0086]) mounted to the output shaft, the output cog assembly including a plurality of varying diameter output cogs arranged sequentially (see [0086]);

a chain (fig. 4, (42); see also [0088] and [0089]) linking one of the plurality of the input cogs (40) and one of the plurality of output cogs (38) disposed opposite the one of plurality of input cogs for transmitting power from the input cog assembly ((40); see also [0086], [0088] and [0089]) to the output cog assembly ((38); see also [0086], [0088] and [0089]),

the chain (fig. 4, (42); see also [0088] and [0089]), in operation, having a high-tension side (see (40); see also [0101]) and a low-tension side (see (38); see also [0101]); and

the input and output cog assemblies (figs. 2-4, (40) and (38); see also [0086]) disposed in close proximity to each other and in a complementary arrangement relative

Art Unit: 3683

to each other with the plurality of input cogs substantially aligned with the plurality of output cogs in a paired arrangement such that in operation the high-tension side (see (40); see also [0101]) of the chain automatically shifts to the input cog directly opposite the destination output cog after the derailleur (figs. 6-9, (50); see also [0101], [0107] and [0110]) laterally displaces the chain from the current output cog to the destination output cog.

Dratewski does not disclose a derailleur engageable with the low-tension side of the chain to laterally urge the chain from a current output cog to a destination output cog, but Linde discloses a transmission (1) with a derailleur (32) engageable with the low-tension side of the chain to laterally urge the chain from a current output cog to a destination output cog (21/22) (also see page 6, line 27 – page 8, line 19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use such derailleur as taught by Linde in place of the means (52) of Dratewski, because such derailleur engageable with the low-tension side of the chain to laterally urge the chain from a current output cog to a destination output cog, is more simple and will make the system more feasible during assemble and/or disassemble of the derailleur than the complex means (52) which is located in the driven shaft Dratewski.

**Re-claim 3**, see a crank assembly (fig. 13, (76); see also [0116]).

**Re-claim 4**, see a crank input cog and a crank output cog (see fig. above).

**Re-claim 6**, see gear ratio (see [0091]-[0100]).

**Re-claim 7**, see housing (fig. 1, (22)).

**Re-claim 8**, see a bicycle wheel (fig. 13, (70), a wheel input cog (44), a wheel output cog (45) and the second flexible torque-transmitting element (80) (see also [0116]).

**Re-claim 9**, see the wheel input (44) and output (45) cogs.

Regarding **claim 10**, Dratewski discloses a transmission (figs. 1 and 2, (20)) comprising:

an input shaft (fig. 2, (27); see also [0085]);

an input cog assembly ((40); see also [0086]) mounted to the input shaft, the input cog assembly including a plurality of input cogs;

an output shaft (fig. 2, (25); see also [0085]) disposed substantially parallel to the input shaft;

an input device (fig. 13, (76)), the output shaft (fig. 2, (25); see also [0085]) is connected to the input shaft (fig. 2, (27); see also [0085]) by a first flexible torque-transmitting element (chain) (see fig. above) and a second flexible torque-transmitting element (drive chain) (fig. 13, (80));

an output cog assembly ((38); see also [0086]) mounted to the output shaft, the output cog assembly including a plurality of output cogs;

one of said input and output cog assemblies comprising cogs of varying diameter arranged sequentially (fig. 2; see also [0085]);

a chain (fig. 4, (42); see also [0088] and [0089]) linking one of the plurality of the input cogs (40) and one of the plurality of output cogs (38) disposed opposite the one of plurality of input cogs for transmitting power from the input cog assembly ((40); see also

Art Unit: 3683

[0086], [0088] and [0089]) to the output cog assembly ((38); see also [0086], [0088] and [0089]),

the chain (fig. 4, (42); see also [0088] and [0089]), in operation, having a high-tension side (see (40); see also [0101]) and a low-tension side (see (38); see also [0101]); and

the input and output cog assemblies (figs. 2-4, (40) and (38); see also [0086]) disposed in close proximity to each other and in a complementary arrangement relative to each other with the plurality of input cogs substantially aligned with the plurality of output cogs in a paired arrangement such that in operation the high-tension side (see (40); see also [0101]) of the chain automatically shifts to the input cog directly opposite the destination output cog after the derailleur (figs. 6-9, (50); see also [0101], [0107] and [0110]) laterally displaces the chain from the current output cog to the destination output cog.

Dratewski does not disclose a derailleur engageable with the low-tension side of the chain to laterally urge the chain from a current output cog to a destination output cog, but Linde discloses a transmission (1) with a derailleur (32) engageable with the low-tension side of the chain to laterally urge the chain from a current output cog to a destination output cog (21/22) (also see page 6, line 27 – page 8, line 19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use such derailleur as taught by Linde in place of the means (52) of Dratewski, because such derailleur engageable with the low-tension side of the chain to laterally urge the chain from a current output cog to a destination output cog, is more simple and



will make the system more feasible during assemble and/or disassemble of the derailleur than the complex means (52) which is located in the driven shaft Dratewski.

**Re-claim 12**, see a crank assembly (fig. 13, (76); see also [0116]).

**Re-claim 13**, see a crank input cog and a crank output cog (see fig. above).

**Re-claim 15**, see gear ratio (see [0091]-[0100]).

**Re-claim 16**, see housing (fig. 1, (22)).

**Re-claim 17**, see a bicycle wheel (fig. 13, (70), a wheel input cog (44), a wheel output cog (45) and the second flexible torque-transmitting element (80)(see also [0116]).

**Re-claim 18**, see the wheel input (44) and output (45) cogs.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 3, 4, 6-10, 12, 13 and 15-18 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Art Unit: 3683

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MAHBUBUR RASHID whose telephone number is (571)272-7218. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mhr

/Robert A. Siconolfi/  
Supervisory Patent Examiner, Art

Application/Control Number: 10/711,193  
Art Unit: 3683

Page 10

Unit 3683